MAD6

6mm bituminous membrane for low frequency acoustic insulation.



EPD

EPD S-P-01923

M.A.D.6 (short for Membrana Acústica Danosa, or 'Danosa Acoustic Membrane' in English) is a 6mm thick high density bitumen modified membrane specifically designed to behave as an anti resonant material. It is an efficient substitute for lead sheets. Between porous absorbers materials works like a panel absorbers (most efficient at absorbing low frequencies).

Presentation

- Length (cm): 450
- Width (cm): 100
- Thickness (mm): 5.4
- Surface (m²): 4.5
- Product code: 610011

Technical Data

Concept	Value	Standard
Mass per unit area (nominal) (kg/m²)	10	EN 1849-1
Improvement to airborne noise on laminated gypsum board partition, ΔR (dBA)	6	EN 140-16
Insulation improvement at 125 Hz (between rigid elements) (dB)	10	EN 140-16
Tolerance (%)	<10	EN 1849-1
Poisson coefficient	0.48	-
Reaction to fire	C s3 d0	EN 13501-1
Resistance to tearing (nail shank) (N)	180 ± 50	EN 12310-1

Concept	Value	Standard
Improvement to airborne noise on laminated gypsum board partition, ΔR (dBA)	6	EN 140-16

Environmental Information

Concept	Value	Standard
Volatile organic compounds (COV's) (µg/m³)	50	ISO 16000-6:2006
Content of recycled raw material (%)	22	-
Post-consumer recycled content (%)	60	-
Manufactured in	Fontanar (Guadalajara) España	-

Standards and Certification

- The sound certifications are the result of tests in an approved laboratory.
- *For any questions about information on the tests, please consult our Technical Department.

Laboratory	Test (EN 140-3) No	Result (EN 717-1)
Danosa	DAN-001-MAD01	RA = 56,4 dBA

Scope

- It is used in industrial insulation as an anti-resonant material, providing acoustic mass to galvanised steel sheets.
- It is used between rigid elements, such as gypsum plasterboard, to improve low-frequency insulation in both vertical and horizontal walls.
- Used between spring elements to increase the overall isolation of the treatment, improving significantly at low frequencies.

Advantages & Benefits

- By adhering to galvanised steel sheets, it improves the resonance of the sheet.
- By increasing the insulation at low frequencies, cavaties used can be kept to a minimal size.
- By increasing the mass of lightweight walls, a higher acoustic performance is achieved.
- It shifts the resonance frequencies of the rigid elements making the insulation stronger.
- Between insulators, it transforms acoustic energy into dynamics, improving insulation at low frequencies.
- Easy to install by stapling to the surface or using M.A.D. Self-adhesive.

Instruction for Use

An installation of the Danosa M.A.D.6 acoustic membrane shown in the following photos:

Indications and Important Recommendations

- As the ceilings are very heavy, we recommend the use of a ceiling grid system consisting of primary and secondary profiles. This system helps to spread loads if any shock absorber anchorage point breaks. See SPD 4.3.
- The ceiling dampers are always anchored to the floor joist or a reinforcing construction element. See SPD 4.2
- The facade cladding in a building must end at the dividing wall between different users. See SPD 2.1
- In dry wall cladding for heights over 4 m, we recommend the use of elastic fasteners. See SPD 2.5
- Gypsum plasterboards must always be anchored to the galvanised steel auxiliary structure, never use plate-plate screws.
- Partition walls must be plastered with at least 1 cm. See SPD 3.
- Partition walls should not be anchored to structural elements (except for roofs in dwellings) such as pillars and facades. In order to maintain the stability of the system, the tiling element must be bonded to the internal floating partition walls.
- It is not possible to perforate with installations in the proposed solution in commercial premises located in tertiary buildings or commercial ground floors in residential buildings. See SPD 2.3 and SPD 4.4.
- Impact sound insulation must be used. See "Sound Insulation Solutions Manual" sheets from AA01-AA04.
- It should be borne in mind that this product forms part of A Sound Insulation system, so the Danosa Building Solutions Catalogue, sheets AA13 to AA15; AA23 to AA25; and AA30 to AA33, Installation of Sound Insulation, should be taken into account. Details of Singular Points (SPD), as well as the rest of the Danosa documentation.
- In the case of central heating or water intake installations, decoupling by means of a cross-linked polyethylene shell. See SPD 1.2

Handling, storage and preservation

- Consult the product safety datasheet.
- According to the EEC directives on labelling hazardous substances (GefStoffV), special labelling is not required.
- Material at room temperature can be handled without special precautions as it is stable at room temperature.
- The product, as such, is not classified as hazardous for transportation.
- Under normal conditions, the product is not hazardous.
- In application, the appropriate measures must be taken when handling machinery (mechanical fixing with staples) or for the application of adhesives via solvent.
- Temperatures above 80ºC alter the material and accelerate its degradation.
- Product components do not degrade significantly over time
- Keep away from flames and sources of heat.
- It is marketed as rolled sheets in coil form and transported loose or grouped on pallets, and is stable at room temperature and during transportation.
- In all cases, the Occupational Safety and Hygiene standards, as well as the standards of good construction practice, must be taken into account.
- For further information, please contact our Technical Department.

Notice

- The information contained in this document and any other advice provided, are given in good faith, based on DANOSA's current knowledge and experience when products are properly stored, handled

and applied, in normal situations and in accordance with the recommendations of DANOSA. The information applies only to the application (s) and the product (s) to which reference is expressly made. In case of changes in the parameters of the application, or in case of a different application, consult the DANOSA Technical Service before using the DANOSA products. The information contained herein does not exonerate the responsibility of the building agents to test the products for the application and intended use, as well as their correct application in accordance with current legal regulations. The product images used in our communications are indicative and may differ slightly in color and aesthetic appearance in relation to the final product.Orders are accepted in accordance with the terms of our current General Sales Conditions.DANOSA reserves the right to modify, without prior notice, the data reflected in this documentation. Website: **danosa.com/en-gb** E-mail: **info@danosa.com** Telephone: **+44 845 074 0553**